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TEACHING IN THE JUNIOR COLLEGE, A SERIES OF SEMINARS CO-SPONSORED BY BROWN UNIVERSITY AND ROGER WILLIAMS JUNIOR COLLEGE.

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THE CONTENT OF THREE LECTURES PROVIDED THE BASIS FOR DISCUSSION AT THESE SEMINARS--(1) ALTHOUGH THE JUNIOR COLLEGE TEACHER IS MORE INTERESTED IN HIS STUDENTS AND IN RESEARCH TO IMPROVE TEACHING THAN IS HIS 4-YEAR COLLEGE COUNTERPART, HIS PROBLEMS DIFFER CHIEFLY IN DEGREE FROM THOSE OF THE SENIOR COLLEGE TEACHER. AN EFFECTIVE TEACHER EDUCATION PROGRAM SHOULD INCLUDE ACADEMIC CONTENT, SUPERVISED TEACHING, AND A PROFESSIONAL SEMINAR. (2) TECHNIQUES SUGGESTED FOR IMPROVING TEACHING INCLUDE OBSERVATION AND SELF-EVALUATION, PRECISION IN DEFINITION OF OBJECTIVES, USE OF METHODS AND MEDIA APPROPRIATE TO OBJECTIVES, USE OF SUPPLEMENTAL MATERIALS AND READINGS, APPROPRIATE ASSIGNMENTS AND EVALUATION DEVICES, ENCOURAGEMENT OF DISCOVERY AND SELF-DIRECTION PROCESSES, WILLINGNESS TO ADAPT AND INNOVATE, SKILL IN QUESTIONING, AND AN EXCHANGE OF IDEAS. (3) SUCCESS IN EXPERIMENTATION DEFENDS ON SUCH FACTORS AS INSTITUTIONAL READINESS, FACULTY PARTICIPATION AND SUPPORT, ASSESSMENT OF SOCIETAL NEEDS, STUDY AND UNDERSTANDING OF STUDENTS, AND DEVELOPMENT OF INSTRUCTIONAL RESOURCES AND CURRICULUM MATERIALS. (WO)

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ERIC

TEACHING IN THE JUNIOR COLLEGE

UNIVERSITY OF CALIF
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SEP 1 1967
CLEARINGHOUSE FOR
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INFORMATION

A SERIES OF SEMINARS

co–sponsored by

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and

ROGER WILLIAMS JUNIOR COLLEGE

March 18, 1967
The Junior College Teacher – A New Breed? . . . . Roger H. Garrison

April 15, 1967
Improving Teaching In The Junior College . . . . Clifford G. Erickson

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Experimental Approaches In Community—
Junior College Programs . . . . . Sebastian V. Martorana

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INTRODUCTION

The teacher and his effectiveness is a topic of major concern to educators and citizens in general. The ever increasing demands of modern society continually challenge the educator to search for improvement in the quality of instruction. Voluminous materials have been written, studies have been conducted, and conferences and discussions are commonplace, but solutions are few and vague.

The junior college is in an opportune position to participate in this challenge of finding meaningful solutions to some of the problems involved in the improvement of teaching. It is an institution primarily devoted to teaching, free from tradition, and open to suggestions for improvement. We have, in the junior college, teachers who are intelligent, vitally concerned individuals who are not entirely satisfied with attitudes and conditions that exist. They are, on the whole, eager to participate in improving their role as teachers.

One obstacle which impedes the faculty is the prevalent attitude that junior college teachers are somewhat less scholarly than teachers in other institutions of higher education. This attitude must be dispelled. We should strive for high levels of performance, for if we fail to do this, the result will surely be mediocre. The key, therefore, is a proper climate for improvement. We believe that if junior college teachers are given this key, they will be spurred on to find new and creative solutions for themselves and, perhaps, for educators in general.

This report exemplifies the cooperative effort of a junior college and a university working toward the improvement of instruction at the Junior College level. Brown University and Roger Williams Junior College co-sponsored a series of three spring seminar-lecture programs based on the theme "Teaching in the Junior College." This program had a dual purpose: (1) to work with present faculty of junior colleges, and (2) to interest graduate schools in initiating programs designed for junior college teachers.

For this program an open invitation was issued to administrators and faculties from twenty-four junior colleges and seven graduate

schools in the New England area to work together and share experiences. Several distinguished junior college leaders served as consultants for the series of programs. Roger Garrison, former vice president of Briarcliff College, New York, and now American Association of Junior Colleges staff associate for faculty, discussed "The Junior College Teacher—a New Breed?"; S. V. Martorana, Executive Dean, Two-Year Colleges, State University of New York, emphasized, "Experimental Approaches in Curriculum"; and Clifford Erickson, President of Rock Valley College, Illinois, presented, "Various Methods of Improvement of Instruction."

This series of seminars provided the opportunity for the teacher to evaluate himself in his role as a junior college faculty member. By and large junior college faculty come from high schools, or other institutions of higher learning with little or no background of the junior college concept, and are not always attuned to the functions and purposes of the junior college, the diversity of the student body, etc. They recognize a need for special orientation geared toward this level of instruction, and would like assistance in developing better skills essential to their teaching. Studying the problems of teaching through free exchange of ideas with other faculty and with consultants should significantly aid present junior college faculty in their teaching effectiveness.

We believe that the seminars have helped graduate schools to better understand the needs and problems of the junior college and our hope is that programs of graduate study for prospective junior college teachers will be initiated.

Anthony J. Salatino

ACKNOWLEDGMENTS

We wish to extend our appreciation to Professor Elmer R. Smith, Chairman of the Education Department, Brown University and President Ralph E. Gauvey of Roger Williams Junior College, for the initial plan to present the seminar lecture series.

We are also indebted to Professor Reginald D. Archambeault who along with Professor Smith represented Brown University on the Co-ordinating Committee with Professor Robert M. Sherman from Roger Williams, who served as Master of Ceremonies.

Our thanks to Anne Marie Levasseur for her secretarial assistance.

The sponsoring institutions are deeply indebted to the Ford Foundation, whose grant to Brown University helped make these seminars possible.

SEMINAR #1 – MARCH 18, 1967

THE JUNIOR COLLEGE TEACHER — A NEW BREED?

ROGER H. GARRISON
Staff Associate for Faculty
American Association of Junior Colleges

There is a question mark on the title of this talk because even those of us who have been immersed for years in the growth and problems of junior colleges are not quite sure that the junior college teacher is a new breed of instructor: he may, in fact, be a mutation. There is much talk about the junior college as a "unique" social institution, with "new" problems, and there is considerable truth in these assertions. However, the problems of junior colleges are not unique, in the sense that they are rare or singular or uncommon; but they certainly are different, both in kind and degree, from traditional four-year college or high school patterns, as these are familiar to us. The reality of these differences is, let me affirm strongly, worth identifying, both by junior colleges themselves—for themselves—and for higher education in general. For if the junior college is to establish its own identity as a developing force in higher education, it needs again and again to define and to explain its evolving nature and its special purposes. It is not enough for junior college spokesmen to state, as they do, that this is a "unique educational invention." The phrase sounds impressive; but it needs to be spelled out in substance.

What I will try to do in the next few minutes is to establish the matrix in which the particular problems and challenges of junior colleges exhibit themselves; and in doing this, perhaps the professional situation of the junior college teacher will be somewhat more clearly defined. And, surely, the context of teaching should suggest elements that must be included in the training and preparation of instructors for these colleges.

The Political-Educational Situation

Most junior college people exhibit a distinct ambivalence about their status in education. For example, it has literally been within the past decade that the public junior college has made the major shift from being Grades 13 and 14 of a public school district to a more independent situation, with local or regional autonomy in over-all governance and financing. In many ways, psychologically as well as

operationally, the junior college heritage has been elementary and secondary schools. But at the same time, the junior college aspires to be—drives urgently to be—a part of higher education.

"We should be neither," says Joseph P. Cosand, President of the St. Louis Junior College District. "We are unique, and provide an intermediate area with its own philosophy and objectives."

He rightly points out that the junior college teachers and administrators may well be slightly schizophrenic in this period of frantic growth and transition. "Our teachers want the salary schedule and the security of secondary schools; yet they want the academic rank of the university. They want to teach, and not 'publish or perish,' but they want the teaching load of the university. They want NDEA funds for building purposes which really were for secondary schools—and so they ask the attorney generals to rule that they are secondary education; but at the same time, they want Higher Education Facilities Act money..."

Or, for example, the junior college teacher wants the sort of professional recognition accorded his four-year colleagues, both within his own institution and outside in the community. Yet he does not, apparently, accept the unwritten sanctions that restrain his university colleagues from outright militancy; and he will unionize and strike, if necessary, to have his voice heard at policy-making levels.

The plain fact is that these apparently contradictory desires and positions are simply signs of evolving status—an evolution that is going to take some time and no little strain in the educational community.

Another significant difference from the four-year college teacher's usual situation is the junior college teacher's typically more direct relationship to the general public. In the comprehensive colleges, with a truly extraordinary spectrum of vocational, technical, and service-oriented programs, faculty work continually with advisory committees from the community, from industry and business. Specific local taxation supports "the junior college," making it a somewhat more focused object of attention than is now true of the total public school system. The college, more often than not in the eyes of the community, is relatively new, it's "ours," and it serves not only the youth of the area, but increasing thousands of adults for whom it is a means of continuing education. Like the high school teacher, the junior college faculty member is, in fact, a public servant. After more than a hundred years of free public education, the public pretty well understands its lower schools. But the general population has yet to be educated and to educate itself more sophisticatedly about this "junior college" which insists that it is not a high school, though it offers many programs similar to those in comprehensive high schools, and yet claims to be higher education, while teaching air frame mechanics, printing, welding, and data processing, and is obviously wholly unlike what the

general public has for years conceived higher education to be.

In brief, the junior college is far from having settled into a familiar pattern. It has been pressed increasingly by sheer numbers. For example, a graph of student population growth looks like the swoop up to Everest's peak because special educational and training programs multiply annually—even monthly—making it extremely difficult to staff the institutions with fully professional people in every area; it is small wonder that acceptable patterns of governance of these colleges have not yet emerged. A.A.U.P. guidelines are of small help, since for the most part these are based on traditional assumptions of college organization and management — yet these same guidelines are used, when opportune, by faculty to obtain leverage with administration. Regular high school patterns are, similarly, of little use, since their basic operational assumptions are apt to be authoritarian and prescriptive. Both junior college faculties and administrations are groping—sometimes with bruising clashes—for a distinctive pattern of governance, suitable to the new type of institution.

The Basic Problem — Aware Administrators

Among other problems — again, not "unique" to the junior college, but certainly more than urgent — is the shortage of administrators who not only know the score, but who also have some reasonably sophisticated grasp of the nature of the game they are in. This shortage, in large part, is a result of the comparative youth of most junior colleges: there simply has not been time for the needful cadre of maturely experienced persons to be developed and brought along from the ranks. This, too, will be remedied as junior colleges grow in experience toward more and more clear definition of themselves and their multiple missions. Training of leadership — at all levels — has high, possibly the highest, priority for the junior college as a whole, whether such training is through in-service experience, as seems most realistic, or by special graduate education.

The Faculty Situation

The faculty of a comprehensive junior college is, once more to cite "differences," a mix seeking to be an amalgam. Assemble instructors from a land grant college, a few from an Ivy League liberal arts institution, some from professional schools, skilled journeymen, technicians who are engineers-once-removed, green graduate students fresh from exposure to The Guild, retired military men seeking a second career, and high school teachers looking for some greener pasture in higher education, and you would have at least a raggedly accurate profile of such a faculty. Bring, let us say, 450 of these diverse backgrounds and persons together to an urban junior college serving 14,000 students on three separate campuses which offers at

least eighty different programs. Face them with a college that has grown 425% in the past four years, whose faculty "veterans" have been with the institution less than five years. Involve them in defining the mission(s) of the college — at best vaguely stated in the catalogue — knowing full well that these missions may be changing almost monthly. Have approximately 40% of this faculty teaching evening division mainly; and have 35% of the total faculty on part-time. Hire 65 new and replacement teachers each year — and find that you really need eighty when fall registration rolls around. Parcel the faculty into divisions, and divisions into departments, and departments into sub-departments; and, perforce, appoint division and department heads on faith of future responsible performance rather than on tested, long-term observation, since few of these teacher-administrators have been around for more than three or four years. Have four major buildings under construction, three in renovation, seven in the planning stage, and a fourth campus development being studied, having — of course — appointed faculty committees to study needs and make recommendations for the bricks-and-mortar translation of programs into usable space. Have two total faculty meetings a year, and accomplish this by the simple, arbitrary method of cancelling afternoon classes each time — otherwise, scheduled conflicts would make a meeting utterly impossible.

As a former university dean, now president of one of these exploding comprehensive colleges, remarked mildly, "I've got a different set of problems here."

Some Practical Realities

Another element of difference between teaching in the comprehensive junior college and in the traditional four-year institution is in the open pragmatism of its instructional aims. In its general liberal arts Associate degree programs, the junior college has two years to produce a transferable student. General "culture" is all very well, and honored by constant assertion, but the blunt fact is in the question, "How many acceptable transfer students are we turning out?"

Similarly in the technical-vocational and other job-skill fields, the aim is frankly, usefully to produce employable graduates, whether from a full two-year sequence or from short-term certificate courses in a particular specialty. It is becoming increasingly evident, if industrial recruitment activity on junior college campuses is any measure, that the two-year college will more and more be the major source of technical and lower-level management manpower the country over.

The pragmatic emphasis naturally influences, and often even dictates, the nature of instruction. Teaching must be more immediate, more relevant to clearly-seen needs, more strictly sure that the student has "got it." Thus, the teacher becomes, not so much the traditional scholar, but rather the student-of-the-applicable, the needful,

the useful. Indeed, a few of the very best junior colleges begin to approach the Whiteheadian dictum that "the school should turn out a pupil who knows something well and can do something well."

Faculty—A Different Direction of Growth

The "scholarship" of a junior college faculty member is, more likely than not, to be directed toward the enrichment of his teaching, rather than toward the discovery of new knowledge to add to the body of scholarship in a discipline. Indeed, the junior college instructor seeks a healthy symbiotic relationship to university researchers and scholars: he wants to learn how, with increasing skill, to use the fruits of the work of other men with sensitivity and perspective—and with a keen sense of the utility of knowledge. This is what his students need. This is what he aims to see that they get. His growth, therefore, is toward what could be called the scholarship of teaching—without in the least suggesting traditional school-of-education meanings for this phrase.

The Student-Centered Difference

Though I am not suggesting by comparison that four-year colleges are uninterested in their students as individuals (despite student jokes about IBM cards), the student-centered emphasis of the junior college is both a philosophy and a fact. Proportionately, two-year college faculty spend much more time and energy helping individual students than is typically true in universities, even in the lower divisions. Such work is apt to be, in the best sense, remedial, supportive, diagnostic, and is designed to get the student as rapidly as possible to an acceptable level of work. If the "difference" between philosophies can be oversimplified, it would be: in the four-year college, the student is brought to the discipline; in the two-year college, the discipline is brought to the student. This may smack suspiciously of spoon-feeding or mollycoddling, and sometimes it is; but the emphasis, I think, is just. The hope is, of course, in the junior college quite as much as in the senior institution, that the student will learn as soon as possible to cope independently with a discipline or a skill. A further difference—and it is not a small one—is that the junior college has only two years to try to accomplish this; the pressure of time is again a major factor affecting instruction.

Faculty Problems—Different in Degree

Junior college faculty problems differ in degree, if not in kind, from those of their four-year colleagues. Listed in rough order of priority, some of these problems are:

1. Lack of time, especially for study in one's own field.

2. Student loads (in many colleges teaching-hour loads of 16 to 20 hours and more are common).

3. Effective adaptation of instruction to extraordinarily heterogeneous groups of students. (Challenging superior students while simultaneously helping those who need remedial work.)

4. Understanding college policies in curriculum development, teaching responsibilities, relationships to guidance, and other areas.

5. Lack of clerical help (or lab assistance or instructional materials or a dozen other non-teaching supportive needs).

6. Evaluating (grading) student work in ways appropriate to (a) kinds of student ability, (b) nature of subject matter, (c) college policies (if any).

Most of these problems are, of course, familiar to teachers, especially in secondary schools. But in the junior college, dealing as it does with freshman-sophomore age students, with mature adults from 25 to 75 who are often mixed in the same classes, and insisting, as it does, on being "higher education," these problems take on added complexity; answers to these problems are far from simple either for the individual teacher or for his administrators.

Preparation of Junior College Teachers

Ordinarily, when we think of preparing college teachers, our minds lock into the traditional pattern of graduate work, with attendant degree attainments. Yet for the bulk of junior college teachers, this familiar route is either unnecessary, irrelevant, or both. Let me explain. In the comprehensive public junior colleges — and as these develop, they will instruct the largest percentage of students — nearly 70% of the instruction is in non-traditional areas: in vocational, pre-professional, technical, public service, and other immediately-job-related areas. Further, since about two-thirds of all junior college students do not continue their education, but move to employment, the traditional scholarship-oriented teaching, even of liberal arts and so-called "general education" subjects, is only partially appropriate to that proportionately small group which intends to transfer to four-year colleges and universities.

For example, most vocational instructors will have backgrounds of extensive work experience and on-the-job training. They will have little use for a "regular" academic post-baccalaureate M.A. or Ph.D. program. But what they will need are refresher and background

courses germane to their specialties; and some real help, preferably not from formal courses in pedagogy, in how to teach. Their "preparation" for instruction, then, could well be in special summer institutes, special graduate seminars, or—as junior colleges are more and more recognizing—in thoroughly planned in-service experiences on their own campuses.

At the present time, the basic acceptable preparation in academic subjects for junior college teachers seems to be the Master's degree: The B.A. or B.S., plus 30 hours of credit, mainly in content (rather than in education or methods courses).

But desirable preparation (i.e., most useful, or "best") as described, or inferred, by many faculty would have it in elements not now offered in M.A. programs. Adequately accomplished, these elements would require a post-baccalaureate period of study ranging from 16 months to two years.

(a) Academic Content. A minimum of 10 courses, or the equivalent, in the subject discipline at the graduate level. Undergraduate courses with "added work" for graduate students taking them were not thought to be satisfactory. The main reason was that the level of class discourse would not be sufficiently mature for advanced students. Of these ten courses, half should be, to the degree possible, interdisciplinary in content and in instruction. (Examples: biology-zoology-botany; sociology-psychology-anthropology; geography-geology-ecology.) Teachers felt that the interdisciplinary approach would (1) provide the necessary broader knowledge base for later teaching of general courses at the freshman-sophomore level; (2) diminish the research emphasis; (3) help the prospective teacher to have a more-than-usually flexible approach to materials and methods of instruction. Nothing in their recommendations suggested any watering-down of the quality of the graduate work; indeed, the emphasis was that the suggested approaches would be more rigorous in many ways than traditional graduate courses.

(b) Supervised Teaching Experience. At least one quarter, and preferably a full semester, of actual teaching responsibility in a cooperating junior college, with at least two preparations. This was not conceived of as "practice teaching," in its traditional sense. Rather, it was described as a bona fide internship, with supervision and counsel both from appropriate university faculty and veteran junior college faculty in the discipline. Recommendations as to the timing of the intern experience varied, though the consensus was for second semester. At the same time the graduate student was doing his intern teaching, he would also continue to take courses, though on a reduced load, in his field.

(c) Professional Seminar. Rather than separate course offerings in Educational Philosophy, Educational Psychology, and Methods of

Teaching (English, or whatever), teachers generally recommended what could be considered a continuing professional seminar, involving all graduate students, from whatever discipline, who were undertaking this "enriched Master's degree" for prospective teachers. As a basic pattern, the Professional Seminar would meet for two hours every other week through the entire span of the graduate program. It would have its own syllabus of appropriate reading material, including recognized works on the history of education, the nature of the learning process, the psychology and problems of students, the nature of teaching, and the like. Ideally, the seminar would be led by carefully prepared teams of graduate professors and veteran junior college instructors, or Master Teachers.

(d) Degree Recognition. Most teachers making these recommendations felt strongly that no "new" degree was needed for such a program. Rather, they asserted that it would "make the M.A. respectable again." They suggested that, in addition to the awarding of the M.A. itself, certificates of Internship Experience and Completion of Professional Seminar could be added to the candidate's dossier.

Such a program as outlined has a number of distinct advantages to recommend it.

(1) It is open-ended. A successful completion of this program would not hinder an interested student from going right on for a Ph.D. if he wished, since his 30 hours of course work would more than likely be acceptable to most graduate departments.

(2) It would conceivably be completed in a summer-academic year-summer pattern, thus reducing a student's financial commitments.

(3) It would, in most areas, make him a desirable candidate for a junior college faculty.

In summary, I have tried to sketch briefly a few of the more significant problems — "different," if not unique — of the junior college by describing a little of the context in which they occur. The comprehensive two-year public college is, indeed, an institution whose time has come. It is a response to a country's aspiration that its citizens shall have open-ended educational opportunity. It is a functional answer to the spreading needs of a technical-industrial society now full-tide in a cybernetic revolution. Like most of our social institutions, it will be called upon for ever more and more services, while at the same time —mainly because of lack of full understanding of the public—it will be endemically under-financed, understaffed, and over-populated. That the junior college will solve its problems as time goes on, most of us hope and believe. How the problems will be solved — and when, if soon enough—and if at the high professional level we hope for—are matters that keep those of us in junior colleges restless at night and plague us, on occasion, with bad dreams.

SEMINAR #2 – APRIL 15, 1967

IMPROVING TEACHING IN THE JUNIOR COLLEGE

CLIFFORD G. ERICKSON
President, Rock Valley Junior College

No doubt you share with me the view that teaching is an art. There are, therefore, no magic solutions for improving teaching in the junior college. Awareness of junior college philosophy is important—Dr. Martorana will treat this topic at your next seminar. The image the junior college teacher has of himself and his role in higher education is important—Dr. Roger Garrison has dealt with this aspect.

The American Council on Education has released a new book entitled, Improving College Teaching, edited by Calvin B. T. Lee. The promotional brochure includes these words, "You will find no easy answers or simple formulas. Rather, Improving College Teaching brings you an authoritative discussion by educators of varied backgrounds and commitments—a broad view of what can be done to promote effective teaching."

It is significant to me that so many of you have come to Providence to consider this question. The mix of junior college and university faculty members represented here today is commendable and a challenge to any speaker. There is a subjective element in the evaluation of effective teaching. This was brought forcefully home to me in the past week on reading the evaluation of the work of Marshall McLuhan by Arthur Schlesinger—both holding Albert Schweitzer chairs for distinguished scholars at Fordham University, posts which bring $100,000 a year for salary research and other expenses. Schlesinger said this about McLuhan's book, Understanding Media:

> "A chaotic combination of bland assertion, astute guesswork, fake analogy, dazzling insight, hopeless nonsense, showmanship, wisecracks, and an oracular mystification all mingling indiscriminately in an endless and random monologue. It also, in my judgment, contains a deeply serious argument."

My remarks shall be drawn from three kinds of experiences: (a) the selection of and association with sixty teachers selected from a faculty of 700 to serve as studio teachers in Chicago's TV College; (b) as examiner with the North Central Association visiting classrooms

in other colleges; and (c) assisting at the Chicago City College in the selection of 50 or more teachers per year for tenure appointments.

My method shall be the use of twenty questions with brief remarks on each to provoke thought and to stimulate discussion in the smaller groups which will follow. There is no profound organization of the series of questions. They are not presented in order of importance. Hopefully, one or more will provide some new insight or some point of departure for our continuing dialogue.

1. HAVE YOU SEEN YOURSELF THROUGH THE EYES OF YOUR STUDENTS? COULD YOU TAKE IT?

Since 1956 the Chicago City College has offered televised courses on open circuit television to the great Chicago audience of 6 million people. Each television instructor is given a series of studio orientation experiences. He is invited to teach on camera anything that he does well and comfortably. It is video-tape recorded for immediate playback to the teacher and trusted colleagues. Typical reactions included the covering of eyes, a desire to turn off the receiver, and a desire to repeat the experience to do it more effectively. The increment of improvement from first to second presentation is always dramatic.

Today, at a cost of $1,000 or up to $20,000 depending on the technical quality desired, we can place a video-tape recorder in a college classroom to enable the teacher to have immediate feedback of his teaching for self-evaluation. In my judgment, the effective use of this device can provide more assistance for the improvement of instruction than any other device or technique. Television teachers in Chicago say that they have become better teachers because of the chance to see themselves teach. They wish it had come much earlier in their careers.

2. HAVE YOU DEFINED YOUR GOALS? DO YOUR STUDENTS UNDERSTAND THEM?

In Chicago's TV College, studio teachers are asked to defer preparation of course outlines, study guides, and telecast lessons until they have defined the objectives for the course. As you may expect, teachers often respond as follows: "Here's my textbook; look at the outline; this is my course." One teacher worked for an entire month full-time before he could develop five or six behavior-oriented objectives. At the end of the month, he said, "This is the most significant thing I ever did in my life. I have finally thought this thing through with the help of my colleagues. To take my objectives seriously, I now must change textbooks, use an entirely different approach, make

different assignments, and evaluate student work on a new basis." The result was a new departure in the teaching of the subject and a change from historical to case-study approach. The course was taught successfully on television and the new approach was incorporated into conventional instruction. The improvement in instruction was a direct result of deliberate soul-searching on the objectives of instruction.

Educational objectives should be discussed with students at the first class session in order that they may understand the materials and methods utilized in the course.

3. DO YOUR LEARNING MATERIALS AND MEDIA HELP YOUR STUDENTS ACHIEVE THEIR GOALS?

I recently visited two junior colleges. Both faculties are concerned about giving students an opportunity to explore the world of audio recorded learning materials in music, drama, and language. One has a library with a very expensive installation of telephone dial retrieval stations linked to 90 tape decks. By dialing a number from 1 to 90, the student may listen to 90 recorded learning experiences selected by the faculty for use in the current week.

The second college has a simple installation one-tenth as costly as the first with student-operated earphone phonograph players. The student has open-shelf access to over 10,000 recordings. Faculty choices for the week are available on multiple jack players to allow a number of students to listen to given recommended recordings of the week. It may be that the second, less-costly and less-sophisticated installation is giving students access to more recorded literature and an opportunity to make more progress toward learning objectives. The benefits of the second installation could be incorporated in the first with additional equipment. If we define our objectives carefully, we shall find them a useful guide in the selection of learning materials and hardware. We shall avoid the ever-present danger of allowing fascination for hardware to confuse ends and means.

4. HAVE YOU NOTED THE REVOLUTIONS IN MATERIALS SUCH AS PAPERBACKS AND OVERHEAD PROJECTOR SLIDES?

It is wholesome to inquire of a junior college librarian the number of book chargeouts per day. A low figure may reflect a tendency toward dependency on textbooks rather than on the library learning resource center. In part, however, a lower figure can be related to the paperback revolution if the college bookstore is doing a brisk business in pocket editions of primary sources.

The paperback makes it possible for a teacher to delete the textbook and ask students to purchase a shelf of primary materials in

pocket edition. The paperback places a new opportunity and responsibility on the teacher to work closely with the bookstore, to make certain primary works are on paperback racks to be assured that research materials and some of the great works of literature are there for students to discover and purchase and read. By this means, even students of modest means may graduate from college with a significant library equal in size and significance to the libraries of the statesman or lifetime scholars of a century ago.

Overhead projector slides represent another revolution. The four-second transparency-making machine has opened up many new horizons for the improvement of instruction. Many companies are now selling kits of visuals printed on paper which are coordinated with textbooks and courses of instruction. Each diagram or visual can be converted to an effective slide for projection on the overhead projector in a few seconds by an unskilled operator. The slide I am using was typed on a bulletin face typewriter available at low cost from several manufacturers of standard typewriters. In my judgment, the overhead projector has tremendous potential for the improvement of instruction. At our college we have one in every classroom. Use is growing rapidly, particularly in fields where good published visuals are coming into the market.

5. DO YOUR ASSIGNMENTS TOUCH ALL OF YOUR OBJECTIVES?

In one of the TV College courses, a teacher had a very well-worked out set of objectives. The objectives included information, understandings, and skills. He was asked how a term paper due at the end of the term would serve to advance students toward the stated objectives. He replied at first that this assignment is honored by tradition in the best schools. When he returned to his objectives, he began to seriously question how the term paper could provide maximum progress.

The teacher worked out a series of five assignments, so planned to provide a ladder of growth in information, understanding, and skill development. The fifth assignment became one of research in primary journals which was now within the ability of the student to achieve. This ladder of experience from steps 1 to 5 became a significant improvement over the traumatic experience of a term paper—which is usually deferred until the end of the term and developed on a crash program over a weekend.

6. DO YOUR EVALUATION DEVICES TOUCH ALL OF YOUR GOALS?

A very able teacher was working with an evaluation consultant on our faculty at Chicago City College. He brought in for analysis a draft

of a 100-item objective examination. He was asked to code the 100 items in accord with his five principle objectives. He was astonished to learn that about sixty of the items were on the information objective, fewer items on each of three others, and no items on the fifth objective. He proceeded to develop new questions, and he returned a week or two later with a far better balanced examination—one which was likely to be more reliable and valid. This same principle of analysis of evaluation devices and materials in terms of course objectives can provide means for improvement, even for those who insist on essay-type examinations.

7. DO YOU 'SPILL THE BEANS' AND KILL THE FUN OF LEARNING?

I was in a very well-equipped science laboratory, observing a demonstration experiment. The students were taking data on a very well-structured experiment. I was pleased to see students gathering data on a significant experiment and to note that they were to have time to plot the data and make an interpretation. The teacher then walked up to the blackboard and said, "Now if you go home and work out the data for Situation A, you will get a graph that looks like this... For Situation B, you will get a curve that goes like that... And the reasons are as follows..." Suddenly, all the drama of learning was torn out of the experience.

Across the corridor twenty-five students were gathered around four beakers of chemicals. The teacher asked questions of his students: "Mary, what do you think is going on in there?" "John, what do you think is going on?" "If we take three drops of this and put it in, what do you think will happen?" "Let's try it." "What do you think happened?"

Here the experiment has mystery. Students were probing the elements like the original investigator might have done. Here learning was fun.

8. DO YOU ANSWER TOO MANY QUESTIONS? ASK TOO FEW?

Ten or twelve years ago when televised instruction began, one of the principle objections raised by teachers and others was that students could not ask the questions. The Ford Foundation was investing some 50 million dollars of seed money to encourage innovations in uses of televised instruction.

The Foundation commissioned an eminent writer with an interest in education but no professional ties to the educational establishment to spend a year visiting the campuses of the country to sit in classrooms, talk to students, watch teaching procedures, and ask the question:

"How necessary to learning is the student's right to ask and to have questions answered during the class session or lecture?" He concluded that all too often we answer too many questions during the class period and rob the student of the experience that should be his to reflect on his own questions, and come to his own conclusions. The investigator asked students to list their questions as they arose during the lecture. At the close of the lecture, the question lists were relatively long. The writer–investigator presented the lists to the same students at the next lecture and asked them to note those which remained unanswered. The lists became very short, in part because the students had answered the questions themselves and had moved on in the learning process. Obviously, there are vital learning situations which require dialogue in which the teacher plays the role of resource person as well as poser of questions. It may be that we can made our lecture situations more effective if we allow students to ask some of their questions of themselves and if we ask good questions to evoke thought.

9. DO YOU TEST THE EFFECTIVENESS OF YOUR LEARNING SITUATIONS AND MATERIALS?

A social science faculty became interested in having students of social science gather information and understanding about great social questions through dramatic presentations produced and staged by the drama department. For a unit on the emerging role of women, the faculties of social science and drama agreed on Ibsen's "Doll House" as a learning vehicle. The play was presented—well done and well timed. Surely, this was learning at its best. The social science teachers began to evaluate the learning outcomes. They were disappointed to find that students did not achieve the desired outcomes. They concluded that the new learning situation required a great deal more prior preparation of students in order that they could more effectively view the drama as a social science experience. Without testing, a strikingly new approach to learning may have been accepted as effective or it may not have been adapted by revision of technique of utilization.

10. HAVE YOU DISCOVERED THE POWER OF THE STUDENT AS A SELF-DIRECTED LEARNER?

In Europe the center of gravity for higher education is on the student. In America at the junior college level, the center of gravity remains on the teacher. When we move the center of gravity from the teacher to the student, we are usually astonished at how much fun the student has, how well he moves at his own pace, and how effective he becomes as a self-directed learner. The creative teacher can do much

to move responsibility for learning on the student. Let me note here very briefly some of the new media and materials available for this effort.

The Audio Laboratory: A classroom can now be converted to a foreign language laboratory for as little as $5,000 if mobile electronic equipment is used. A secretarial classroom can become a tape-fed dictation laboratory for under $2,500. Cost is no longer a factor. The equipment available is simple to operate, high fidelity in response, and flexible in application. The electronic classroom can bring us to the ideal of every student learning skills at his own rate. The teacher can be free to monitor learning, to give individual assistance, to evaluate the recorded learning materials. The slow learner can keep up with his colleagues by using the laboratory longer hours until mastery of each lesson is achieved.

The Audio-Tutorial Method: This method, a variation of the foregoing, was pioneered by Dr. Postlewaite, a biologist at Purdue University. The teacher prepares laboratory instruction on tape recording to enable the student to become a self-directed laboratory learner. The teacher is free to serve as resource person, to evaluate progress, and to evaluate the recorded learning material by observation of student progress. We are using this method successfully at Rock Valley College in biology. Other departments have expressed an interest in the method. The principal innovator in the junior college field is Oakland Community College in Michigan where the audio-tutorial method is being applied in the entire curriculum. The method is being used to expand technology offerings rapidly without traditional commitments for faculty and laboratory facilities.

Programmed Learning: The programmed textbook is certainly here to stay. English 2600 by Harcourt-Brace pioneered the self-teaching of English form and grammar. Better books are now available. The Center for Programmed Learning in New York City directed by Dr. Komaski can provide directories of currently available materials. Delta College in Michigan has now had years of experience with a center for programmed learning to assist community college students overcome deficiencies by self-directed learning. This may be one of the most effective ways for an open-door community college to meet its commitment to provide educational opportunity to all those who wish to learn.

11. HAVE YOU ENRICHED THE EXPERIENCE OF HIGH-ACHIEVING AND LOW-ACHIEVING STUDENTS IN A TUTORIAL CENTER?

Here I bring you an experience of the last year at Rock Valley College. Last fall, a growth in mathematics enrollments made us face the prospect of classes of 35 to 40 in remedial mathematics classes.

To meet the problem, we devised a way of employing high-achieving mathematics students under federally-supported Economic Opportunity Work-Study Grants to serve as tutors for low-achieving students. The project began in a corridor and was moved quickly to unassigned hours in an art room. Next year, we shall have space assigned for the Tutorial Center. The Tutorial Center has served the needs of the low-achieving student so well that next year the mathematics department will try an experimental class of 75 students in Remedial Mathematics. We are pleased with the value to the tutors as many of them have developed an interest in teaching in the junior college as a career. Other departments have undertaken the method, including English and modern language. The Tutorial Center has made a significant contribution to the improvement of instruction at our college.

12. DO YOU ASSIST IN THE SELECTION AND UTILIZATION OF MEDIA AND MATERIALS IN THE LEARNING MATERIALS CENTER?

Effective learning requires ample and relevant learning materials. We give a lot of lip service to the learning materials center concept. It won't work unless faculty members break the crusts of apathy which tie us to the textbook. We must broaden our concept to include the whole range of learning materials. We must explore this range, work with our librarian to obtain these materials and find ways to have them utilized to enrich the experience of our students. I think this is a clear obligation of faculty members. Administrators can ask for it, librarians can plead for it, but only teachers can do it.

13. DO YOU CONTINUE PROFESSIONAL GROWTH THROUGH STUDY, PROFESSIONAL CONFERENCES, AND VISITATION OF OTHER COLLEGES?

It can be a valuable experience to visit other campuses, talk to other faculty, study their methods and materials. Attendance at professional conferences can keep us close to the growing edge of ideas. At Rock Valley College for a faculty of seventy-five, we budget $14,000 for travel. We regard this as a significant way to acquire new ideas and to move our faculty forward.

14. ARE YOU ADAPTING NEW IDEAS IN YOUR FIELD OF SCHOLARSHIP TO IMPROVE YOUR TEACHING?

English faculties on at least two campuses of the Chicago City College have made significant strides in the use of structural linguistics as a new approach to teaching English to under-achieving students

from underprivileged backgrounds. After twelve years of instruction in formal English with little understanding, these students have a conditioned response to "dive under the desk" every time a teacher mentions the words "preposition" or "adjective." The English teacher can sweep away all of these terms and define a sentence as a 1 or a 2. A (1) word is a table, a chair, etc. A (2) word is run, jump, etc. Suddenly the old inhibitions are broken and learning begins by the direct and functional method for people who want to read and write taught by people with an uncommon joy of seeing rapid growth and development.

The National Committees on Mathematics, Biology and Chemistry are giving leadership in the rapid enrichment of courses at all levels. High schools are now graduating seniors with mathematics and science competence formerly associated with the college level. We must keep in touch with these national developments and keep our junior college course work in tune with the changing times.

15. IS YOUR FACULTY IN DIALOGUE ACROSS LINES OF SUBJECT DISCIPLINE? DO STUDENTS PARTICIPATE?

There was intellectual excitement at the University of Chicago in the 1930's. The so-called "New Plan" provided for interdisciplinary general courses in the first two years of general education. Great scholars who had written some of the primary works of the day were working together as groups on general courses. Many times they told their classes that they were more learners than teachers as they related their own to larger fields. We should provide opportunities to students and faculty for inter-disciplinary dialogue by seminars, guest speakers, and other techniques. This kind of stimulation can help to keep teaching vital and relevant.

16. ARE YOU WILLING TO ALTER THE COMBINATIONS OF PREPARATION TIME, CLASS SIZE, AND CLASS ORGANIZATION TO IMPROVE INSTRUCTION?

We are all too often committed to the class size of twenty-five and fifteen hours of teaching per week. Can we be certain that this is the way we will get our best work done? We should experiment with this formula with the express view of trying to improve teaching and learning. The usual formula assigns about 125 students in five three-semester hour courses for a full teaching program. Perhaps we would have a better situation if the teacher was assigned one course of 125 or more students. Perhaps he could lecture twice a week, spend a larger portion of his time in preparation, and break the 125 down into six groups of 20 apiece for weekly seminars, where the ideas of the two lectures can be thoroughly discussed. Perhaps students should

share the burden of discussion leader and allow the teacher to serve as resource person. This plan would afford more time for preparation and individual conferences, more participation by students in discussion, and class leadership.

Using open-circuit television, a Chicago City College studio teacher can reach up to 800 credit students effectively and teach an additional 50,000 to 100,000 people on a not-for-credit basis at no additional cost. This is a dramatic way to alter the combination of preparation time, class size, and class organization.

17. HAVE YOU PROCEDURES FOR REQUESTING AND USING GRANTS FOR INNOVATION, EXPERIMENTATION, AND RESEARCH IN TEACHING?

Upon request, the Russell Sage Foundation will send you a substantial volume cataloguing all of the foundations in America. If you review the list for your own community, you will be astonished at how much money may be available to people with the will to ask and creative ideas. There are also federal grants for innovations in education. The Esso Foundation has a special interest in educational innovations at the junior college level. If the opportunity to prepare proposals is extended to all faculty members, much more creativity will be unleashed than may be funded. Institutional funds can also be committed for worthy projects which will improve teaching or counseling or other services. If the community and junior colleges of America are to reach their full potential, we need to encourage creativity and find funds to offer released time for teachers and to support other costs of innovation and research. We should explore sources of foundation, governmental and institutional funds to encourage these efforts to improve instruction. A helpful report of a 1965 conference on The Foundation and the Junior College is available through the American Association of Junior Colleges.

18. DO YOUR SENIOR TEACHERS WORK CLOSELY WITH COLLEAGUES NEW TO THE PROFESSION TO HELP THEM IMPROVE INSTRUCTION?

This simple method has worked very well at Rock Valley College, founded two years ago. As we have recruited our faculty, we have tried to secure a range of age and experience. We have employed new graduates with Masters degrees when we can place them in association with an experienced teacher of demonstrated competence. This team approach, which is as readily available to established institutions, can afford rapid improvement in the quality of teaching of the new teacher and intellectual stimulation to the experienced teacher.

19. DO YOU LEARN FROM PART-TIME LECTURERS WITH SPECIAL COMPETENCE AS PRACTITIONERS IN OCCUPATIONAL CURRICULUM AREAS?

A community college, be it public or private, can recruit faculty members in occupational areas such as business, health science, and technology from the corps of local practitioners in these fields to serve as part-time lecturers, day or evening. For the most part, these fine people have academic qualifications and a wealth of experience on which to draw. Some of them with a long latent interest in teaching can be persuaded to become full-time teachers. All of them have something to contribute to the life of the college. It is also wholesome to have faculty members take positions in industry during recess periods and to serve as coordinators between campus and community in order that the campus shall be enriched by contact with community life and vice versa.

20. DO YOU WELCOME THE EXCHANGE OF IDEAS WITH LAY ADVISORY COMMITTEES FOR OCCUPATIONAL CURRICULA?

Lay advisory committees can do much to improve instruction by helping to fit curricula to community needs. At Rock Valley, we already have 17 such committees. We have been pleased by the number of good ideas which have come from these groups without compromise of our own controls of the educational process and curriculum building. These committees have helped us develop curricula, identify potential faculty members or lecturers in technical fields, and, above all, recruit students and assure them of places of employment after graduation.

Out of this work with advisory committees has come our Career Advancement Program, a work-study program which places our college in partnership with 33 major companies in the recruitment and education of students in electronics, mechanical design, drafting, and production control.

Without further comment, I offer you these twenty questions as catalysts for discussion on the improvement of teaching in the junior college.

SEMINAR #3 – MAY 13, 1967

EXPERIMENTAL APPROACHES IN COMMUNITY— JUNIOR COLLEGE PROGRAMS

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The joint faculty committee that planned the program for this seminar were most helpful to me in preparing for my part by suggesting in rather specific language the topics to which they wished my comments to be addressed; at least, so it seemed to me when I first saw the list of questions they phrased to delineate the topics suggested. Upon closer examination, however, and particularly when I set about to prepare my comments on each of them, I discovered that they really had not been as helpful as first appeared to be the case; indeed, it was not very long then that the "method in their approach" came through to me. Each of the topics suggested by the questions listed if adequately covered could easily represent a lecture that would take all of the time that had been allocated to me to cover all six.

My first substantive comment to you, therefore, is that none of the six questions that I shall attempt to reply today will be covered in a way that I would consider complete. However, I intend to touch upon all six at least to a point of providing a basis for discussion by all of the participants in this seminar later today and to a point that my own professional view and conclusions on the question will be known to you to agree with or to challenge later on.

Before starting the review and response to the six questions, however, I should like to present my definition of the expression "community–junior college" which will be used repeatedly in this lecture. The term will be used inclusively to take in all types of post–high–school, two–year collegiate institutions that serve to extend educational opportunity at a localized or rather closely defined regional level. The term is intended to include junior colleges, community colleges, technical institutes, county colleges (as they are called in New Jersey), and the like, and both public and privately controlled institutions.

Furthermore, to establish the "ground rules" that were in mind when I prepared the paper and which I trust you will keep in mind in your responses and queries later on, I should stress that much of the basis for reply to the questions on which you have asked me to speak

is derived from my own personal and professional observations and experience. While I made a rather thorough review of the literature available, some published and some in transient informational sources, about experimental colleges in general and experimental community-junior colleges in particular, I found that there was relatively little readily compiled information about the extent or nature of the experimental approaches under examination in the two-year institutions. (The big exception to this generalization is the work of B. Larmar Johnson, Professor of Higher Education at the University of California at Los Angeles, to whom I shall give frequent credit in what follows.)

The organization of my presentation, then, will follow the sequence of thought suggested by the questions posed for my comment by your faculty committee. The questions (somewhat reordered to indicate that I was reserving the traditional professorial right to "think otherwise" from the way of your committee) and slightly reworded were:

1. Is the junior college open for experimentation in staffing, curriculum, and facilities?
2. What are the best ways of developing experimentation in the junior colleges?
3. What means would best stimulate faculty thinking and involvement in experimentation?
4. What sort of experimentation is needed?
5. What sort of experimentation is ongoing?
6. What experimentation is being developed in New York State?

Institutional Readiness for Experimentation

Clearly the off-hand answer to the first of the questions posed should be and is a clear, "Yes." This must be for the simple reason that the community-junior college is an educational institution, and at least to me, an educational institution practically by definition is open for experimentation and innovation and improvement. An educational institution should be steeped in a spirit of inquiry, regardless what the particular content of its program may be—liberal arts, occupational, or general.

From the earliest days of the "junior college movement," this institution was identified as "innovative," "dynamic," and "creative." For those of you who like to take an historical approach to the question, you will find that characterizations such as have just been used were often used in the writings of Leonard V. Koos who among other designations referred in his famous Commonwealth Study of Junior Colleges published in the early 1920's as "a force for the reorganiza-

tion of education," Walter Crosby Eells, and other early writers.

The characterization of the community-junior college as an affirmative agency for educational change has carried on and is very strong today. One active leader in the advancement of higher education in the United States recently wrote:

> "American higher education can only be understood if one looks at the great common characteristics of excellence, the climate of instruction and research and the community of scholars.
>
> "As the two-year community college takes an ever more important place in this great enterprise it has the potential to increase both its vitality and its diversity. In it the community of scholars makes contact with the larger community of all the people in a response to their needs. If the community college remains within the community of higher education, both communities will flourish to the enhancement of the public welfare. Indeed, just as the land-grant college added to the devotion to learning of the colonial college a concern for the liberal and practical education of the industrial classes, in the several pursuits and professions in life through resident, instruction, research, and extension service, and the state universities and state colleges went beyond this to 'let each become all that he is capable of becoming,' so the community college gathers up all of these strands to weave yet a new pattern, perhaps even with new fabrics and new looks, to serve the needs of the present day."[1]

On closer examination of the community-junior college movement in this country, however, one must report that actual accomplishments and the level of energy in experimentation expected of these institutions have been far from fulfilled. Perhaps this may be in part to the fact that the expectations were set so high that no matter how much effort and accomplishment might be recorded, the critics could claim ineffectiveness in performance. But even staunch friends and supporters of these institutions suggest that performance has been in fact far below the claims in experimentation and innovation made for them.

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[1] Albert E. Meder, Jr. "The Community College in Higher Education," in The Community College in Higher Education, p. 20. A Report of the Conference on the Role of the Community College in Higher Education, Lehigh University, Bethlehem, Pa., Nov. 21-22, 1965.

B. Lamar Johnson in his special study of this matter first painted this rather drab picture:

> "Despite the substantial and relatively comprehensive list of practices identified in this exploratory survey, it is clear that junior colleges, in general, are doing little experimentation in the effective utilization of faculty services. It must be recognized that most of the colleges included in the survey were selected because they had been known to engage in some innovating practices, but even among these institutions most of the practices reported are found in a scattering of colleges only.
>
> "The general picture revealed in the survey is one of significantly less experimentation than would be expected, or certainly hoped for in an institution which is often referred to as 'the most dynamic unit of American Education.'"[1]

Other, less friendly writers use language that is much more blunt, perhaps even unjust. Professor Roger C. Owen described his views as follows:

> "I had hoped to discern growth not only in size but equally substantial modifications in purpose and curricula. Unfortunately, although the giant is certainly motile, evidence indicates that far from exhibiting a youthful quest for change, the junior college, scarcely forty years old as a commonplace educational form, exhibits a degree of stability usually characteristic only of the semi-moribund."[2]

My own view, after all of this is examined and taken into account is that there is much more readiness for experimentation in the community-junior colleges than they are given credit for. Readiness can not and must not be equated with achievement, however, for the most willing to perform sometimes are denied the resources and support to do so. To get innovation and experimentation, both material resources and moral support are essential, but more on this later on.

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[1] B. Lamar Johnson, Islands of Innovation, pp. 12-13. Occasional Report from UCLA Leadership Program, Number 6. School of Education, University of California, Los Angeles, March, 1964.

[2] Roger C. Owen, "Anthropology and Junior College Curricula," University of California, Santa Barbara. Unpublished paper.

Ways to Develop Experimentation

This brings us to the second question up for our attention today. Just how is experimentation and innovation stimulated and encouraged in community-junior colleges? The question as phrased by your faculty planning committee implies a value judgment that frightens me off a bit, for it calls for an indication of these actions that could be considered best in accomplishing the purpose. Really, I do not believe that anyone in the country knows actually how best to do this. The implied points of attack, however, that John I. Goodlad offered with reference to another educational effort where the call is for more research and innovation helps to identify the kind of obstacles that stand in the way of more community-junior college experimentation. He said:

> "This paper proposed that teachers are limited in what they can do to provide more meaningfully for individual differences among learners by factors largely outside of their control which predetermine their degress of freedom—namely, expectations for schooling, the institutional curriculum, and school organization."[1]

I submit that to stimulate and develop more extensive and successful innovative programs in community colleges it will be necessary to develop sharper public attitudes and understanding about the nature of community-junior college education, break down the rigidities that prevail in the curriculum and programs of services of higher educational institutions, and become anew the "forces of reorganization in education" that Leonard V. Koos claimed the community-junior colleges to be over forty years ago.

More specifically, to do these things, the following are essential: (1) an institutional commitment to experimentation and innovation as a proper function and purpose of the junior college, (2) time for the conduct of such innovative practices and to evaluate their results, and (3) money to support the effort. Given these three essentials, I see no good reason why any or all community-junior colleges cannot become experimental institutions as Hugh Stickler has defined one, an

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[1] John I. Goodlad, "Diagnosis and Prescription in Educational Practice," New Approaches to Individualizing Instruction, p. 36. A Report of a Conference on May 11, 1965 to mark the dedication of Ben D. Wood Hall, Educational Testing Service, Princeton, New Jersey.

institution that manifests two characteristics," . . . (1) it is persistently committed to the belief that the enterprise of higher education can be improved and (2) it innovates on a continuing basis in sustained efforts to achieve that improvement."[1]

The importance of the three ingredients of support cannot be overemphasized. Without an institutional commitment to the effort and purpose of innovation, reaching and including the board of control of the institution, the usual experience is that it is considered as an "additional orancillary enterprise" and not part of the main thrust of the college. Without time for an exploratory, pilot, or experimental project to show its merits or faults, (and a consistent level of support throughout that time), no one can assess validly and with confidence the worth of the enterprise. And without money, all talk about innovation and experimentation becomes just that—talk and nothing else. Experimentation and innovation costs money, let no one tell you otherwise. The Urban Center Programs (about which I will tell you later) that we are attempting in New York State are costing over $2.8 million a year, now; after an expenditure of $100,000 to make a study of their need, and an initial year of operation of $2.0 million, the Pilot Guidance Center for Women at Rockland Community College is costing the state over $75,000 a year to see through. There is no question about it, innovation costs money; without fiscal support, little or nothing constructive in this direction can be done or expected.

Stimulation of Faculty Participation and Support of Experimentation

The suggestions for improvement of the level and quality of effort in innovation and experimentation so far mentioned have been addressed to the institution at large. The next question brings us down to an even more focal point in the creation of a climate and setting favorable to new ideas and new practices in the institution—what actions or methods would best stimulate faculty to support and participate in the effort?

The question is a very cogent one, particularly in this day of faculty insistence in involvement in development of institutional policy

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[1] W. Hugh Stickler, "The Experimental College; Progress, Problems, and Prospect." Paper presented at the Invitational National Seminar on the Experimental Junior College, Palo Alto, California, February 23–26, 1967.

and the general increase of faculty activism in higher education. Unless the faculty can be convinced that innovation and experimentation is in their enlightened self-interest and in the direction of improving the status and recognition of the institution with which they are affiliated, little constructive accomplishments can be achieved. The faculty in an educational institution can make or break any idea about the improvement or change in its educational program; if in no other way than by exerting what Chancellor Gould of State University of New York refers to as "academic inertia" the faculty ultimately is the center of success or failure of the enterprise.

Coming down once more to specifics, my view is that basically the same essentials must be present to stimulate and encourage faculty to become involved and support new practices and programs as were cited to be essential for the institution at large—institutional commitment, fiscal support, and time. The point of emphasis with regard to the present question we are examining, however, is that all three of these elements of support must focus directly on the faculty member —he must realize that institutional support for his participation in experimentation is present, he must be given fiscal support to do this and financial rewards for so serving his institution, and he must be given time within his regular professional load in his employ in the institution to get this particular service done.

On this point, your attention is called to a very interesting debate that is going on among community-junior college teachers and administrators about the role of research and faculty involvement in experimentation in these institutions. The debate is reflected in articles that are published from time to time in the Junior College Journal and other scholarly, educational journals. Their contents bring out, sometimes directly and other times indirectly, the concern of the faculty about the presence of the three essentials in support of faculty involvement that I have mentioned. One writer, Professor Jack D. Forbes, participating in this debate, for example, writes:

> "Above all, junior colleges must not demand so much classroom time from their instructors that they leave no opportunity for reading and research.
>
> "...A fifteen-hour teaching load is a maximum, in my opinion, and a twelve-hour load is highly desirable."[1]

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[1] Jack D. Forbes, "Research, Teaching, and Excellence," Junior College Journal, XXXVII (December, 1966), 9.

Mr. Forbes, it should be noted, is making a plea for a permissive attitude on the part of administrators to support faculty participation in research activity broadly defined. The debate goes on to raise the question of whether faculty should be so broadly encouraged or should be helped only to conduct research more specifically related to the educational objectives of community-junior colleges. On this point, John E. Anderson has this to say:

> " 'We're interested in teachers, not researchers,' is a statement which is current among junior college administrators. Further, it seems to be an inclination on the part of some to actively discourage any research tendencies found in their faculty members, and to instead exhort them to spend their time on becoming 'better teachers.' The suspicion seems to be that the two concepts, research and teaching if not mutually exclusive, are at least incompatible drives within the same individual.
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> "The junior college administrator who expresses this attitude, either explicitly or implicitly, is unfortunately committing at least two major errors. The first is that he is exhibiting a fundamental misunderstanding of research. The second is that he is doing a disservice to his institution and ultimately to the taxpayers who support it....
>
> "To state that there are many problems, both in the teaching and administrative facets of conducting the main functions of the junior college, which are susceptible to the research process would seem to be fatuous, except for the fact that so many administrators behave as if it were not so."[1]

In this last quoted position you see a concession given that the faculty member may participate in research activities that serve to stimulate his professional development, instructional effectiveness, and institutional development, all at the same time. Other participants in the debate of the role of the faculty in research in the community-junior college insist that the only kind of research activity that is valid for these institutions is that which leads directly to changes of programs or practices of instruction at the institution. This is the view expressed by Stuart E. Marsee, President of El Camino College in California, who says:

> "It is generally understood that junior colleges are teaching

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[1] John E. Anderson, "Research in the Junior College: Anathema or Anodyne?" Junior College Journal, XXXV (November, 1964), 15.

institutions—not research centers. It is true that faculties of junior colleges are not 'research oriented' compared to the faculties of four-year colleges and universities. One of the attractive features of the junior college is that instructors are not confronted with the frustrations of progression through the system of 'publish or perish.'

"However, it is important to recognize that the need for and involvement of teaching or administrative faculty in self-study or institutional research is as great in the junior college as it is in the four-year institutions. Although each collegiate institution is unique, all must determine educational programs, provide for fiscal responsibilities, and be aware of institutional needs. They must plan for both short-and long-range programs, to study the staffing and governing of the institution, and to meet the changing needs of society."[1]

The point that I should like to stress is that all of these types of research effort indicate places where innovation and experimentation can take place and where the faculty can be involved. To effect this involvement well, however, will demand a proper direction and a proper recognition of the faculty for doing so. This means again time—reduced teaching loads to get this other task done; money—for needed materials, exploratory settings, and supporting staff help; and still something else very important, recognition—promotions in rank and in faculty status at the institution. These, to the best of my knowledge and judgment, are the best ways to stimulate and develop faculty participation in any developmental, innovative, or experimental ventures in any educational institution.

Types of Experimental Efforts Needed

A partial answer to the next question has already been suggested: experimental efforts are needed in all facets of institutional programs and services and can be used to benefit the community-junior college movement not only where the innovation is tried but in many other like communities over the nation. Stickler, in my opinion, is quite right; an innovative institution is one that maintains a constant posture and effort to do its educational tasks in better ways. My only addition to this view is the hope that more community-junior colleges

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[1]Stuart E. Marsee, "A President's View of Institutional Research," Junior College Journal, XXXV (May, 1965), 25.

can be excited to such a posture by giving them the help and encouragement essential to the effort.

Community-junior colleges should be innovative in every phase of their operations. Attempts to improve and streamline administrative practices and structure are needed; for example, in methods of interpreting the institution to the community to develop better public understanding and in ways to tie in the administrative operations of community-junior colleges with those of the high school level which precedes them and the baccalaureate colleges and universities which follow. New and creative approaches and techniques are needed to improve our liaison with the business, industry, professional, and public services in the localities that employ the products of the occupational programs in these institutions.

For the special purposes of this seminar in "teaching in the community-junior college," however, I should like to suggest for your special attention four areas of operation that I think merit a closer view. The faculty in community-junior colleges should be particularly concerned about and interested in experimentation in (1) assessing societal needs that can be appropriately met by the programs of instruction and community service offered by their institutions, (2) developing appropriate curriculums and improving the methods of instruction employed, (3) studying and analyzing the characteristics of students who seek to benefit by the courses and services of the institution, and (4) appraising themselves as a faculty, a community of scholars and educational workers, in a community-junior college.

Assessing Societal Needs

My experience leads me to conclude that this is one of the truly weak links in the chain of effort of community-junior colleges to be an effective agency for social change and improvement. The techniques we employ to determine the character and the range of social needs that can be resolved by the kind of education we provide need to be improved. So do the methods that are used to develop a sufficient consensus among public and educational leaders about societal needs that demand new practices and programs in community-junior colleges. My rather strong feelings and views on this particular point come from a broader experience than just that with community-junior colleges. When, as Assistant Commissioner for Higher Education Planning, I was responsible for developing the 1964 Statewide Plan for the Development and Expansion of Higher Education for the Board of Regents in New York State, I was recurrently impressed with the lack of information that existed for sound planning, on the one hand, and, on the other hand, the lack of clear consensus on appropriate actions to take that prevailed in both the political and educational spheres of leadership.

We need much more hard research based information about the nature of our social and cultural development and the relationship these hold for educational program improvement. A great deal of our attention in this regard in the community-junior college field has centered on "manpower" requirements of the economy; such inquiries are usually the basis for developing occupational programs in our two-year colleges. Again I must say that our techniques for conducting and assessing even this relatively tangible type of social need are, to put it rather kindly, unsophisticated and crude.

But when I say that we need to be more enlightened and creative in assessing societal needs, my hope is to alert you to even more significant lines of investigation. Professor Owen, whom I quoted at the start of this paper as being rather cruel in his characterization of community-junior colleges, must be supported, I believe, in his contention that a shift in curriculum emphasis is needed when he says, "Only by acquainting masses of our citizens with the possibility, through social theory and social methods, of coming to cope with, and perhaps to resolve social problems by social means, may politicians, administrators, and tax payers be created who will opt for the expansion of social agencies and other means to deal with ever more press-problems."[1]

Improvement of Instruction and Development of Curriculum

As educational workers who believe in the use of education to improve the nature of society as well as to carry it on, community-junior college personnel are obligated to formulate instructional programs and procedures that are efficient and successful. This means simply that much, if not all, of the professional energy in the community-junior colleges should be directed toward the improvement of instruction and organization of sound programs of offerings and services.

You will notice that I put the two propositions together—curriculum development and improvement of instruction. This is deliberate, for I believe that the two are such inter-related activities that it is virtually impossible to separate one from the other when either is being conducted in a viable and creative manner. A faculty that is enthusiastically and creatively involved in the development of a new approach or extension of the college's curriculum, consciously related to known and demonstrable social, economic, and cultural needs in

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[1] Roger C. Owen, op. cit. p. 5.

the community, cannot help but be so affected that its approach to instruction will be energized and made more vital for the students, and the converse is, I sincerely believe, fully as true.

One point in this matter deserves really strong emphasis. The entire scope of curriculum in the community–junior college can be included in efforts toward innovation, experimentation, and improvement: this means the liberal arts or university parallel programs, the occupational curriculums, those devoted to general education objectives, and those aimed and providing the student with insight and understanding about himself, his talents and competencies, and his drive and ambition. Too often, when one visits a community–junior college campus or reads the published literature on these institutions, one gets the impression that only a segment of the faculty and professional staff of the institution can contribute meaningfully to creative educational changes on the campus—usually the impression left is that this large contribution is the private and sole realm of the faculty who have assignments and advanced degrees in the liberal arts and science fields. This simply is not true. Faculty members who teach in the occupational fields, special service personnel in guidance, testing, and counseling, and, indeed, yes, even lowly administrators, in community–junior colleges can participate meaningfully in experimentation and to tell the truth often are real wellsprings for good ideas for constructive innovation and change.

Notice that I have included the institutional functions of student services (counseling, testing, guidance) in the broad category of curriculum and improvement of instruction. Again this is deliberate and for the same reason as offered for combining consideration of curriculum and instruction. Student services in the community–junior college, in my view, should not be artificially separated from the other main thrusts of activity in the institution. Ideally, productive activity in one leads to the improvement in the other. I have yet to see a two-year college that carried on new and successful enterprises in student services that did not also simultaneously exhibit a vital setting for instruction and learning in general.

Studying the Students

Clearly, then, one of the lines of inquiry that needs widespread expansion would relate to the students that attend community–junior colleges. Out of this and as an extension of the research effort there ought to follow more innovation in ways that students are assisted to further their learning and to develop their skills. Indications are all around us that community–junior colleges are attempting too much to apply concepts of instruction and programming that are valid perhaps for students who attend other types of post–high–school educational

institutions but are not necessarily valid for the students that come to the two-year colleges. I emphasize that the research on this matter is sketchy and incomplete, but the contention I just stated is heard often and certainly should be examined more thoroughly than it has been to date.

Several observations that emanated from New York State's Urban College study serve to illustrate the point that I am attempting to make here. This study, which sought to examine the need for new and different approaches in post-high-school education to reach larger numbers of educationally and culturally deprived persons in the large urban centers of New York State, offered these conclusions from a large number of interviews of young people representative of the culturally deprived groups in the population:

> "The analysis of current functions and programming produced a number of conclusions about major gaps (or needs). The first is concerned with programming, namely, the need for expansion in order to provide a full spectrum of occupational and liberal education programs leading to certificates of completion and degrees, including remedial or developmental work, and appropriate to the diverse needs and abilities of the young people to be served. The most serious gap is in programs which may not lead to a degree, and in many instances, will be less than two years in length.
>
> "The second gap is primarily one of function, namely, in the provision of recognized means to achieve upward educational and occupational mobility, for the large numbers of new students to be served whose highest potential is not at all apparent at the start, and for others with a gross discrepancy between their measured potential and their prior achievement in the public schools."

The report then sets forth two strong conclusions. The need is for both more counseling and better counseling, particularly with respect to occupational choice, and a little later, "Better counseling in the community colleges must be accompanied by better articulation with public school guidance programs."[1]

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[1] Dorothy M. Knoell, Toward Educational Opportunity for All, Office of the Executive Dean for Two-year Colleges, State University of New York, Albany, New York, 1966, 194-195.

Despite "calls to the colors" such as these that are being sounded from many quarters for community-junior colleges to respond, there are not many institutions that are coming forward with really imaginative and creative programs that seek to find new ways to understand the educational needs of the students and new methods to help them learn and develop. Such innovation, in my judgment, merits more serious attention from all of us in the movement.

Innovation in Faculty Development and Utilization

And so we come to a consideration of the faculty itself in the community college as an area in which new ideas and different approaches are needed. I realize that I am perhaps touching upon heresy, but none-the-less I feel obligated to report my view that more community-junior college faculty attention should be turned inward. A process of introspection by the faculty on each community-junior college campus that asks itself hard questions first about the nature of the student body and about the educational purposes of the institution which the faculty is supposed to serve and then, turning on itself, asks equally hard questions about the persons on the faculty and professional staff. Such questions might well include: How did the faculty get to be in the community college? How and from what sources were they recruited? Was all of this process in direct relationship to the educational purposes set for the institution? What is their attitude toward the purposes of the college? How do they apply their talents and specialized training to implement the purposes of the college? And many others.

Out of such penetrating inquiry, again hopefully, more innovation for improved practices should emerge. They should be related both to the development of faculty and related professional personnel and to their utilization once they are employed. That more experimentation and imaginative thinking is needed in the development of professional personnel has been recognized for some time is evident from this quotation from the well-known Medsker study of community-junior colleges, now some seven years old:

> "Needless to say, another immediate task is the procurement and training of teachers and counselors for the two-year college. This will not be accomplished easily, either quantitatively or qualitatively. One of the difficulties will be to find and prepare teachers whose image of themselves as staff members of a two-year college is in harmony with the distinctive purposes of this type of college rather than with some other type.

> Even the most adequate preparation of teachers is incomplete if their attitudes toward the junior colleges are incompatible with its purposes."[1]

Sad to say, with the exception of some notable programs such as those at the universities participating in the junior-college leadership training program, there are not very many graduate institutions in the nation that are giving special attention to the preparation of faculty for community-junior colleges, to say nothing at all about the lack of imaginative approaches in the programs that exist. Again we seem to be operating generally on the assumption that training and development methods that are effective for high-school teachers or for faculty in four-year colleges and universities are ipso/facto effective for community-junior colleges. The proposition needs serious testing. My own view is that much of what is effective in these other faculty preparation programs is obviously useful in the training of good community-junior college faculty; nevertheless, there is a body of specialized knowledge and skills that ought to be imparted to every community-junior college instructor, especially about the character of the institution of which he is a part, which when possessed will improve the effectiveness of the instructor and thereby that of the entire institution.

The rather bleak picture just painted about lack of innovation in preparing instructors is practically matched in the matter of faculty utilization. B. Lamar Johnson attempted to explain the lack of experimentation in utilization of faculty in community-junior colleges in these words:

> "But perhaps the reasons for little experimentation are not difficult to identify:
>
> "1. Up to the present two-year colleges, with notable exceptions in such shortage fields as physics and mathematics, have had relatively little difficulty in recruiting faculty members. The plurality of new junior college instructors comes from high school teaching positions, and there currently appears to be an almost inexhaustible supply of secondary school teachers with requisite academic qualifications who welcome the opportunity to teach in junior colleges.
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> "2. Junior colleges are expanding so rapidly, and preparing for further expansion, that the time and energies of administrators and other staff members are often consumed with

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[1] Leland L. Medsker, The Junior College: Progress and Prospect, p. 319. New York: McGraw-Hill Book Company, Inc., 1960.

> "keeping up" activities and duties. Little time and energy are available—or at least made available—for planning and experimentation in the use of faculty services.[1]

Both of the reasons he advances are still valid, I believe, to explain the situation. As I have indicated, time, money, and material as well as psychological support by the administration are essential if an institution is to be creative in the work it does. As long as we dwell on "keeping up" activities and on a "keeping up" support level, little or no real novelty and productive creativity in the way community-junior colleges do business can be expected.

Types of Experimentation Underway

Despite the obstacles that confront real and widespread experimentation and innovation in the community-junior college there are notable examples of new departures that have been tried and proved to be successful. Not as many as we would like, out of a history of sixty years and a population of now some 800 junior colleges in the land, but still a notable few.

The innovative developments that are going on or have more or less proved themselves can be divided into two types. First, there are those that represent the entire institution—a sort of "total commitment" to innovation and experimentation. These are the institutions that B. Lamar Johnson calls "experimental colleges" which he has now been searching out and studying for several years and reports only a few.

Some that have become successful to the point of becoming national figures often in both educational and general public informational circles can be called to your attention. There is, for example, the "TV college" that was developed by the Chicago City Junior College with much help from the Ford Foundation. Another is Oakland Community College in Michigan which as a new institution under its first president John Tirrell in 1965 started out immediately to try a "systems approach" to curriculum and instruction. Still another is Alice Lloyd College, Pippa Passes, Kentucky, which seeks through innovative methods to use junior-college educational opportunity to attract youth of leadership promise to the southern mountain country and by that to improve the culture of that section of the nation.

Another that can be mentioned, in my judgment, is Fashion Institute of Technology, one that B. Lamar Johnson does not mention in his

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[1] B. Lamar Johnson, "Island of Innovation," op. cit., p. 13

search. Fashion Institute is a two-year college in New York City that directs its entire institutional energy at meeting the post-high-school educational needs of the garment and fashion industry in the nation and the world. F. I. T. says "The industry is our community." It is a striking institution and thus far a huge success.

My guess is that if we were to define an experimental college more broadly (to include such ventures as F. I. T. and Alice Lloyd College), the list of "experimental colleges" with total commitment would grow considerably.

A second type or classification of these colleges, as opposed to those of a total institutional commitment, would be the community-junior colleges that are conducting new departures in part but not all aspects of their operation. The list of such institutions is, of course, much longer. One would expect that to be true because the usual practice in education is to seek change gradually, by evolutionary rather than by revolutionary developments, and I feel that much can be said for that attitude.

A point of significance, I believe, is that examination of the innovation and change that is going on of this sort in community-junior colleges shows it to be affecting every aspect of operations. There are colleges that are trying new ideas and different procedures in administrative practices, instruction and student services, curriculums, housing and physical facilities, and the rest.

Let me mention just a few that may be of special interest to the participants in today's seminar. Bronx Community College several years ago carried out a new departure in the use of closed circuit T.V. in the instruction of associate degree nurses that is now being copied all over the nation not only to train nurses but other technicians as well. At Everett Junior College in the State of Washington a program was developed where the faculty in the three instructional divisions, English and Literature, Humanities, and Social Sciences, joined in a "team teaching" approach in the core general education courses offered there. Miami-Dade Junior College in Florida is carrying on a more extensive innovative project in "team teaching." And at Alfred Agricultural and Technical College in New York State, a pilot-demonstration counseling center is attracting national attention.

Some Innovative Programs In New York State

So much for examples of "stirrings" and accomplishments of innovative nature over the nation. Your planning committee, in the last of its six questions, asked that I comment on the notable experimental ventures going on in New York State. I have already mentioned the closed circuit television teaching program pioneered at Bronx Community College in New York City and the pilot counseling center at

Alfred Agricultural and Technical College. A recent round-up of innovative programs by the Office of the University Dean for Two-Year Colleges of State University of New York brought out others that could be mentioned, for example, the M.R.S. Program (Programs for Mature Returning Students—women entering a second career venture) at Hudson Valley Community College and the pilot Counseling Center for Women at Rockland Community College.

In the interest of time, however, I shall elaborate briefly on only two other programs in New York State that I think are especially promising innovative attempts. One is the "Community College Health Careers Project," and the other is the "Urban Center" development.

The "Community College Health Careers Project" was initiated about two years ago by the State Education Department with the cooperation of the State University of New York. It was in answer to the question that is raised constantly (and has been raised again at this conference): what are the new fields of a sub-professional or technician level that are emerging in the human health field? To this basic question, the planners thought of the project as seeking objective information and insight into two related questions: (1) what sort of curriculum—learning experiences and subject matter content, clinical practice, etc.—might a two-year college provide to train the needed technicians in the new fields? and (2) where are the instructors for these programs coming from and how can they best be trained? Some money to get the project started was obtained from the U.S. Office of Education—Vocational Education—Act of 1963 program, and the Kellogg Foundation.

You will be interested in the ten fields that were identified as viable training areas for the health manpower needs of the state and *within the scope of education and training* properly conceived to be a two-year college program. Pilot programs in each of these is now being developed at a cooperating two-year college with the help of a statewide advisory committee. They were:

(1) Environmental Health Technology: Broome Tech. Com. Col.
(2) X-Ray Technology: New York City Community College
(3) Inhalation Therapy Technology: Nassau Community College
(4) Medical Emergency Technology: Manhattan Community Col.
(5) Bio-Medical Engineering Technology: Monroe Com. College
(6) Medical Library Records Technology: Alfred Agricultural and Technical College
(7) Occupational Therapy Assistant: Erie County Technical Community College
(8) Dental Assisting: Erie Tech.—SUNY Urban Center
(9) Surgery Technology: Bronx Community College
(10) Opthalmic Dispensing Technology: New York Com. College

A key and major part of the entire project centered on the question of instructor recruitment and training. Obviously there just are no well organized and developed training centers committed to train instructors for these fields as there are for training community-college faculty in the liberal arts and sciences. We know where to go to get qualified faculty to teach mathematics or history or biology or even nursing. But where do you go to get a good faculty member in x-ray technology or inhalation therapy or medical emergency technology? Even more basic a question—how do you train such an instructor?

We were fortunate to get a positive response from both State University at Buffalo and City University of New York to assist in the search for an answer to this question. Again with the help of the advisory committee in each area, each university and a group of the cooperating community colleges are moving forward to formulating an instructor-training program. At State University at Buffalo, attention is concentrating on five fields: environmental health, bio-medical engineering, medical records library, dental assisting, and occupational therapy assisting. At City University of New York, attention is on the other five fields: x-ray technology, inhalation technology, medical emergency technology, opthalmic dispensing, and surgery technology.

All of us in the two-year colleges all over the state (and, indeed, over the nation) feel that we have a great stake in this work. We want to do all we can to make it work for several reasons: (1) the faculty are needed now; (2) the techniques and institutional relationships that are being developed, we hope, will be extended to other new occupational instructional fields in the two-year community and technical colleges; and (3) we feel this is the best way to develop both high quality curriculums and to train high quality instructors.

The "Urban Center" development is quite a different thing. Rather than aiming at a particular manpower need in our society, it aims a special thrust of post-high-school educational effort at the problems of the culturally and educationally deprived. They offer a completely unstructured educational and training service to any person from the educationally deprived groups of the population in four large city complexes in New York State. In each area, State University of New York and a cooperating community college seeks to identify persons in such communities and to encourage their participation in the "Urban Center" programs for counseling, educational remediation, skills training, and re-orientation to regular academic study, or to gainful employment. The areas where the four "Urban Centers" are operating (now closing their first year) and the cooperating colleges are: Bedford-Styvesant in Brooklyn—New York City Community College; Harlem in New York City—Borough of Manhattan Community College; Buffalo—Erie County Technical Institute; and the "Capital District" of Albany-Schenectady-Troy— Hudson Valley Community College.

Obviously, one academic year of experience cannot provide a firm basis for evaluating this venture. However, with continued experience and development of the "Urban Centers," State University of New York and the cooperating community colleges look to them as places where new and hopefully more successful techniques for identifying and reaching persons heretofore educationally deprived can be developed, where instructional methods for purposes of helping individuals of such background can be perfected, and where instructional resources and curriculum materials for programs of this kind can be worked up, tested, and made generally available.

Conclusion

As I conclude this presentation, I wish to emphasize again the importance of a constant attention to the new and different in accomplishing the educational mission of the community-junior college. Flexibility and freshness of approaches have always characterized these institutions. Now more than ever this characterization should be maintained and strengthened in every way possible. We should all work to obtain those three essentials that this paper emphasized as basic ingredients to innovation—institutional commitment, time and money. More than this, community-junior colleges should look for strength and guidance in developing innovative practices to every possible source to enable them to do their jobs better. B. Lamar Johnson gave good advice when he suggested the four best sources of insight into sound experimented efforts as being: (1) the past history and trends of junior college development in the nation, (2) the past history and development of experimentation in higher education generally, (3) the theory of administration, and (4) the theory of curriculum development.

To this list, in my judgment, there should be added a fifth place that innovators in community-junior college education can consult for help in their efforts; it is the theories of learning and of psychological counseling. As student-centered instructional educational institutions, the community-junior colleges should always retain primary focus on the individual how he learns and how he can best be assisted to progress toward his educational and personal goals.

Finally, your attention is called again to the differentiated functions of the administrators and faculty in community-junior colleges that best promote the cause of innovation and experimentation. Both must help formulate and uphold the institutional commitment that is essential to the effort. Beyond this, however, the administrator must see that the faculty has the time and resources to carry forward innovative ideas and practices, and the faculty must have the energy, breadth of mind and vision, and sense of cooperation to try the new and to accept constructive change. Without this mutually supporting attitude, little can be expected; with it much can, and I am sure will, be done.

40 CONFERENCE PARTICIPANTS AND INSTITUTIONS REPRESENTED

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